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RESULTS OF THE 1934 BLACK'S MOUNTAIN INSECT CONTROL PROJECT
LASSEN NATIONAL FOREST

by
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In the fall of 1934, the Bureau of Entomology and Plant Quarantine recommended the control of epidemic infestations in the ponderosa pine - Jeffrey pine stands of the Black's Mountain Unit of the Eastern Lassen area. The Forest Service accepted the recommendation, allotted the necessary funds and started work on October 22, 1934. The project continued until January 7, 1935 when heavy snowfall prevented further work. Vance S. Brown, foreman in charge of the project, submitted a report on the work on March 7, 1935 under the title "Report on Hall's Flat Insect Control Project. Winter 1934-1935, Lassen National Forest".

The following general statistics from Brown's report are pertinent to a consideration of the results of the work.

Acreage treated	15,590
Trees treated	3,320
Volume b.m. treated	3,886,300
Total cost	\$23,100.61
Cost per m.b.m.	\$5.94

Since 1934 the Bureau has followed the results by cruising three plots in the untreated area surrounding the project boundaries and two plots within the treated area. One of the treated plot records had to be discontinued because of change in status.

Plot loss records are unsatisfactory for accurate determination of quantitative changes resulting from control work because of local variations in infestation trends. However, the relative changes that occur on suitable untreated plots, when compared with the treated plot records, furnish a basis for general estimates of the results of the control work. A better basis cannot be secured except at much greater cost.

From 1931 through 1934, as a general thing, the untreated plot losses dropped in relation to the losses on the treated plot. Treatment occurred in 1934. The next two years of record show a marked rise for two of the three untreated plots. Before 1934 the losses on one averaged 79 percent of the treated plot. For the two years following treatment they averaged 120 percent of the treated plot. Similar figures for the other two untreated plots are 51 before and 88 following treatment and 108 before and 104 following treatment.

The 1935-1936 treated plot losses were but 34.2 percent of those of 1931 through 1934. Losses on the untreated plots for the two years following treatment were 45 percent of those of the four years preceding treatment. This indicates a differential of about 8.8 percent in favor of the treatment.

In commercial pine areas the value of stumpage saved by control is the most important factor to consider in determining the value of the control work. The following general estimates of stumpage and values, which are based on the plot results, give some indication of the degree of success of the project. Values are calculated on the basis of a stumpage rate of \$2.50 per m.b.m.

	Per acre	Estimate for treated area
Estimated natural loss		
1935-1936	465 b.m.	7,249,350 b.m.
Cruised loss, 1935-36	354 b.m.	5,518,860 b.m.
Estimated saving 1935-36	111 b.m.	1,730,490 b.m.
Value of stumpage saved	\$.28	\$4,326.23
Cost of project	\$1.48	\$23,100.61
Net cost of project	\$1.20	\$18,774.38

Extrinsic values, the worth of which cannot be estimated, also may enter the picture. Reduction in fire hazard, reduced road clearing costs and other factors cannot be omitted in considering the ultimate value of the work. However, in terms of the stumpage value alone, the results were not as successful as previous projects in the Eastern Lassen area. (See "Results of 1933 Control Projects in Modoc and Lassen Forests", by K. A. Salman. November 25, 1936.)